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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,848	12/19/2001	Mohammed N. Islam	20434-758	8994

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DALLAS, TX 75201-2980

EXAMINER

MONBLEAU, DAVIENNE N

ART UNIT PAPER NUMBER

2828

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/033,848

Applicant(s)

ISLAM, MOHAMMED 

Examiner

Davienne Monbleau

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 95-97, 99, 100 and 102-104 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 95-97, 99, 100 and 102-104 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
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TECHNOLOGY CENTER 2800

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/19/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see Response, filed 3/17/03, with respect to the Statutory Double Patenting rejection for Claims 95-97, 99, 100 and 102-104 have been fully considered and are persuasive. The Statutory Double Patenting Rejection of Claims 95-97, 99, 100 and 102-104 has been withdrawn.

Applicant's arguments, see Response, filed 3/17/03, with respect to the Provisional Statutory Double Patenting rejection for Claims 95-97, 99, 100 and 102-104 have been fully considered and are persuasive. The Applicant cancelled the conflicting claims in the co-pending applications. Thus, the Statutory Double Patenting Rejection of Claims 95-97, 99, 100 and 102-104 has been withdrawn.

Examiner acknowledges Applicants willingness to submit a Terminal Disclaimer for US 6,356,384 and US 6,052,393 if required and in order to further prosecution.

Even though the previous rejections have been withdrawn, the arguments for allowance are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 95-97, 99, 100 and 102-104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. (U.S. Patent No. 6,091,538) in view of Kim et al. (U.S. Patent

No. 5,815,308). Regarding Claim 99, Takeda et al. teach in Figure 6 an amplifier system comprising a splitter (30), a first amplifier coupled to the splitter (32), a second amplifier coupled to the splitter (34), and a combiner (38). It is inherent in an optical communication system that fibers are used to connect the optical devices. Takeda et al. further teach in column 2 lines 60-65 that said amplifiers may be rare-earth doped optical amplifiers, but do not teach Raman amplifiers. Kim et al. teach in column 6 lines 53-62 that it is known in the art to substitute one kind of amplifier for another. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a Raman amplifier in Takeda et al., as taught by Kim et al., because it is known in the art to substitute various kinds of amplifiers for application for different optical communication devices.

Regarding Claim 102, Takeda et al. teach in Figure 6 an amplifier system comprising a splitter (30), a first amplifier coupled to the splitter (32), a second amplifier coupled to the splitter (34), and a combiner (38). It is inherent in an optical communication system that fibers are used to connect the optical devices. Takeda et al. further teach in column 2 lines 60-65 that said amplifiers may be rare-earth doped optical amplifiers, but do not teach Raman amplifiers. Kim et al. teach in column 6 lines 53-62 that it is known in the art to substitute one kind of amplifier for another. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a Raman amplifier in Takeda et al., as taught by Kim et al., because it is known in the art to substitute various kinds of amplifiers for application for different optical communication devices.

Regarding Claim 103, Takeda et al. teach in Figure 6 an amplifier system comprising a splitter (30), a gain medium (32) coupled to the splitter, a rare earth doped amplifier (34) coupled

to the splitter, and a combiner (38). It is inherent in an optical communication system that fibers are used to connect the optical devices. Takeda et al. do not teach providing gain through a third order non-linearity. Kim et al. teach in column 6 lines 53-62 that it is known in the art to substitute one kind of amplifier for another, which would affect the type of gain. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the desired amplifier in Takeda et al., as taught by Kim et al., because it is known in the art to substitute various kinds of amplifiers for application for different optical communication devices and to achieve a desired amplification or gain, such as third order non-linearity.

Regarding Claim 100, Takeda et al. teach in Figure 6 that a first set of wavelengths go into a first amplifier (32) and a second set of wavelengths go into a second amplifier (34).

Regarding Claim 104, Takeda et al. teach in Figure 6 that a first set of wavelengths go into a gain medium (32) and a second set of wavelengths go into an amplifier (34).

Regarding Claims 95-97, the method of a device is not germane to the issue of patentability of the device itself, since the device itself obviously uses the method. Therefore the rejection used on the device applies also to the method of the device. (See rejection on Claim 102).

Further regarding Claim 96, Takeda et al. teach in column 1 lines 19-20 an erbium-doped optical fiber.

Further regarding Claim 97, it is known that amplifiers may broaden the spectrum.

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### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 5500764 and US 5323404.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davienne Monbleau whose telephone number is 703-306-5803.

The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on 703-308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*Davienne Monbleau*

DNM  
April 23, 2003

*Paul Ip*

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